

Nuclear Regulatory Commission

§ 30.72

Byproduct material	Microcuries	Radioactive material ¹	Release fraction	Quantity (curies)
Technetium 97 (Tc 97)	100	Cesium-134 .....	.01	2,000
Technetium 99m (Tc 99m)	100	Cesium-137 .....	.01	3,000
Technetium 99 (Tc 99)	10	Chlorine-36 .....	.5	100
Tellurium 125m (Te 125m)	10	Chromium-51 .....	.01	300,000
Tellurium 127m (Te 127m)	10	Cobalt-60 .....	.001	5,000
Tellurium 127 (Te 127)	100	Copper-64 .....	.01	200,000
Tellurium 129m (Te 129m)	10	Curium-242 .....	.001	60
Tellurium 129 (Te 129)	100	Curium-243 .....	.001	3
Tellurium 131m (Te 131m)	10	Curium-244 .....	.001	4
Tellurium 132 (Te 132)	10	Curium-245 .....	.001	2
Terbium 160 (Tb 160)	10	Europium-152 .....	.01	500
Thallium 200 (Tl 200)	100	Europium-154 .....	.01	400
Thallium 201 (Tl 201)	100	Europium-155 .....	.01	3,000
Thallium 202 (Tl 202)	100	Germanium-68 .....	.01	2,000
Thallium 204 (Tl 204)	10	Gadolinium-153 .....	.01	5,000
Thulium 170 (Tm 170)	10	Gold-198 .....	.01	30,000
Thulium 171 (Tm 171)	10	Hafnium-172 .....	.01	400
Tin 113 (Sn 113)	10	Hafnium-181 .....	.01	7,000
Tin 125 (Sn 125)	10	Holmium-166m .....	.01	100
Tungsten 181 (W 181)	10	Hydrogen-3 .....	.5	20,000
Tungsten 185 (W 185)	10	Iodine-125 .....	.5	10
Tungsten 187 (W 187)	100	Iodine-131 .....	.5	10
Vanadium 48 (V 48)	10	Indium-114m .....	.01	1,000
Xenon 131m (Xe 131m)	1,000	Iridium-192 .....	.001	40,000
Xenon 133 (Xe 133)	100	Iron-55 .....	.01	40,000
Xenon 135 (Xe 135)	100	Iron-59 .....	.01	7,000
Ytterbium 175 (Yb 175)	100	Krypton-85	1.0	6,000,000
Yttrium 87 (Y 87)	10	Lead-210 .....	.01	8
Yttrium 88 (Y 88)	10	Manganese-56 .....	.01	60,000
Yttrium 90 (Y 90)	10	Mercury-203 .....	.01	10,000
Yttrium 91 (Y 91)	10	Molybdenum-99 .....	.01	30,000
Yttrium 92 (Y 92)	100	Neptunium-237 .....	.001	2
Yttrium 93 (Y 93)	100	Nickel-63 .....	.01	20,000
Zinc 65 (Zn 65)	10	Niobium-94 .....	.01	300
Zinc 69m (Zn 69m)	100	Phosphorus-32 .....	.5	100
Zinc 69 (Zn 69)	1,000	Phosphorus-33 .....	.5	1,000
Zirconium 93 (Zr 93)	10	Polonium-210 .....	.01	10
Zirconium 95 (Zr 95)	10	Potassium-42 .....	.01	9,000
Zirconium 97 (Zr 97)	10	Promethium-145 .....	.01	4,000
Any byproduct material not listed above other than alpha emitting byproduct material	0.1	Promethium-147 .....	.01	4,000
		Radium-226	0.001	100
		Ruthenium-106 .....	.01	200
		Samarium-151 .....	.01	4,000
		Scandium-46 .....	.01	3,000
		Selenium-75 .....	.01	10,000
		Silver-110m .....	.01	1,000
		Sodium-22 .....	.01	9,000
		Sodium-24 .....	.01	10,000
		Strontium-89 .....	.01	3,000
		Strontium-90 .....	.01	90
		Sulfur-35 .....	.5	900
		Technitium-99 .....	.01	10,000
		Technitium-99m .....	.01	400,000
		Tellurium-127m .....	.01	5,000
		Tellurium-129m .....	.01	5,000
		Terbium-160 .....	.01	4,000
		Thulium-170 .....	.01	4,000
		Tin-113 .....	.01	10,000
		Tin-123 .....	.01	3,000
		Tin-126 .....	.01	1,000
		Titanium-44 .....	.01	100
		Vanadium-48 .....	.01	7,000
		Xenon-133	1.0	900,000
		Yttrium-91 .....	.01	2,000
		Zinc-65 .....	.01	5,000
		Zirconium-93 .....	.01	400
		Zirconium-95 .....	.01	5,000
		Any other beta-gamma emitter .....	.01	10,000
		Mixed fission products .....	.01	1,000
		Mixed corrosion products .....	.01	10,000
		Contaminated equipment beta-gamma .....	.001	10,000
		Irradiated material, any form other than solid noncombustible .....	.01	1,000

[35 FR 6427, Apr. 22, 1970, as amended at 36 FR 16898, Aug. 26, 1971; 59 FR 5519, Feb. 7, 1994; 72 FR 55926, Oct. 1, 2007]

§30.72 Schedule C—Quantities of radioactive materials requiring consideration of the need for an emergency plan for responding to a release.

Radioactive material ¹	Release fraction	Quantity (curies)
Actinium-228	0.001	4,000
Americium-241 .....	.001	2
Americium-242 .....	.001	2
Americium-243 .....	.001	2
Antimony-124 .....	.01	4,000
Antimony-126 .....	.01	6,000
Barium-133 .....	.01	10,000
Barium-140 .....	.01	30,000
Bismuth-207 .....	.01	5,000
Bismuth-210 .....	.01	600
Cadmium-109 .....	.01	1,000
Cadmium-113 .....	.01	80
Calcium-45 .....	.01	20,000
Californium-252 .....	.001	9 (20 mg)
Carbon-14 (non-carbon dioxide) .....	.01	50,000
Cerium-141 .....	.01	10,000
Cerium-144 .....	.01	300

Pt. 30, App. A

10 CFR Ch. I (1–13 Edition)

Radioactive material ¹	Release fraction	Quantity (curies)
Irradiated material, solid noncombustible .....	.001	10,000
Mixed radioactive waste, beta-gamma .....	.01	1,000
Packaged mixed waste, beta-gamma ⁴ .....	.001	10,000
Any other alpha emitter .....	.001	2
Contaminated equipment, alpha .....	.0001	20
Packaged waste, alpha ⁴ .....	.0001	20
Combinations of radioactive materials listed above ¹ .....	.....	.....

¹For combinations of radioactive materials, consideration of the need for an emergency plan is required if the sum of the ratios of the quantity of each radioactive material authorized to the quantity listed for that material in Schedule C exceeds one.

²Waste packaged in Type B containers does not require an emergency plan.

[54 FR 14061, Apr. 7, 1989, as amended at 61 FR 9902, Mar. 12, 1996; 72 FR 55926, Oct. 1, 2007]

APPENDIX A TO PART 30—CRITERIA RELATING TO USE OF FINANCIAL TESTS AND PARENT COMPANY GUARANTEES FOR PROVIDING REASONABLE ASSURANCE OF FUNDS FOR DECOMMISSIONING

I. INTRODUCTION

An applicant or licensee may provide reasonable assurance of the availability of funds for decommissioning based on obtaining a parent company guarantee that funds will be available for decommissioning costs and on a demonstration that the parent company passes a financial test. This appendix establishes criteria for passing the financial test and for obtaining the parent company guarantee.

II. FINANCIAL TEST

A. To pass the financial test, the parent company must meet the criteria of either paragraph A.1 or A.2 of this section. For purposes of applying the Appendix A criteria, tangible net worth must be calculated to exclude all intangible assets and the net book value of the nuclear facility and site, and total net worth, which may include intangible assets, must be calculated to exclude the net book value and goodwill of the nuclear facility and site.

1. The parent company must have:

(i) Two of the following three ratios: A ratio of total liabilities to total net worth less than 2.0; a ratio of the sum of net income plus depreciation, depletion, and amortization to total liabilities greater than 0.1; and a ratio of current assets to current liabilities greater than 1.5; and

(ii) Net working capital and tangible net worth each at least six times the amount of decommissioning funds being assured by a parent company guarantee for the total of all nuclear facilities or parts thereof (or pre-

scribed amount if a certification is used); and

(iii) Tangible net worth of at least \$21 million; and

(iv) Assets located in the United States amounting to at least 90 percent of the total assets or at least six times the current decommissioning cost estimates for the total of all facilities or parts thereof (or prescribed amount if a certification is used), or, for a power reactor licensee, at least six times the amount of decommissioning funds being assured by a parent company guarantee for the total of all reactor units or parts thereof.

2. The parent company must have:

(i) A current rating for its most recent uninsured, uncollateralized, and unencumbered bond issuance of AAA, AA, A, or BBB (including adjustments of + and –) as issued by Standard and Poor's or Aaa, Aa, A, or Baa (including adjustment of 1, 2, or 3) as issued by Moody's; and

(ii) Total net worth at least six times the amount of decommissioning funds being assured by a parent company guarantee for the total of all nuclear facilities or parts thereof (or prescribed amount if a certification is used); and

(iii) Tangible net worth of at least \$21 million; and

(iv) Assets located in the United States amounting to at least 90 percent of the total assets or at least six times the current decommissioning cost estimates for the total of all facilities or parts thereof (or prescribed amount if a certification is used), or, for a power reactor licensee, at least six times the amount of decommissioning funds being assured by a parent company guarantee for the total of all reactor units or parts thereof.

B. The parent company's independent certified public accountant must compare the data used by the parent company in the financial test, which is derived from the independently audited, year-end financial statements for the latest fiscal year, with the amounts in such financial statement. The accountant must evaluate the parent company's off-balance sheet transactions and provide an opinion on whether those transactions could materially adversely affect the parent company's ability to pay for decommissioning costs. The accountant must verify that a bond rating, if used to demonstrate passage of the financial test, meets the requirements of paragraph A of this section. In connection with the auditing procedure, the licensee must inform the NRC within 90 days of any matters coming to the auditor's attention which cause the auditor to believe that the data specified in the financial test should be adjusted and that the company no longer passes the test.

C.1. After the initial financial test, the parent company must annually pass the test